

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 4. (Canceled).

5. (New) An integrated antenna structure for integration into plastic paneling parts furnished with coating films as a surface finish and having an antenna structure element integrated into an antenna film wherein

the coating films include a coating-film carrier layer, a coating-film color layer and a coating-film clearcoat layer, wherein

the antenna film is formed by the coating-film carrier layer, into which a plurality of antennas are integrated, said antenna structure further including,

a substrate layer arranged on a surface of the antenna structure element integrated into the coating-film carrier layer, a lining layer being arranged on said substrate layer, and

a contact-making layer making contact with the plurality of antennas integrated into the coating-film carrier layer,

said contact-making layer being formed between the coating-film carrier layer and the substrate layer.

6. (New) A method for the production of an integrated antenna structure for paneling parts furnished with coating films as a surface finish and being provided with an antenna structure element integrated into an antenna film, comprising the steps:

providing a continuous, deformable coating-film carrier layer, which forms an antenna film on a surface by one of coating, cladding and metallizing with an antenna architecture having a plurality of antennas and providing a

contact-making layer for making contact with said plurality of antennas;

(S2) layer-by-layer application of a coating-film color layer and a coating-film clearcoat layer on a surface of the coating-film carrier layer which is opposite to the surface provided with the antenna architecture;

(S3) thermoforming of the coating film which is provided with the antenna architecture and is formed by the coating-film carrier layer, the coating-film color layer and the coating-film clearcoat layer;

(S4) performing a component primary shaping; and

(S5) curing of the coating-film clearcoat layer.

7. (New) The method for the production of an integrated antenna structure as claimed in claim 6, wherein step S2 is executed prior to step S1.

8. (New) The method for the production of an integrated antenna structure as claimed in claim 6, wherein
the coating-film clearcoat layer is cured by irradiation with UV light.

9. (New) The method for the production of an integrated antenna structure as claimed in claim 7, wherein
the coating-film clearcoat layer is cured by irradiation with UV light.

10. (New) An integrated antenna structure for paneling parts, comprising:
an antenna structure element integrated into an antenna film,
a coating film having a coating film carrier layer;

a coating film color layer and a coating film clearcoat layer wherein said antenna film is formed by the coating film carrier layer and includes a plurality of integrated antennas;

a substrate layer arranged on a surface of the antenna structure element integrated into the coating film carrier layer;

a lining layer arranged on said substrate layer;

a contact layer making contact with the plurality of antennas wherein said contact making layer is positioned between the coating-film carrier layer and the substrate layer.

11. (New) A method for production of an integrated antenna structure, comprising the steps:

(a) providing a first surface with a continuous deformable coating film carrier layer to form an antenna film on said first surface by one of coating, cladding and metallizing with an antenna architecture having a plurality of antennas;

(b) providing a contact-making layer for contacting said plurality of antennas;

(c) applying a coating film color layer and a coating film clearcoat layer on a second surface of the coating film carrier layer which is opposite said first surface;

(d) thermoforming the product of steps (a), (b) and (c);

(e) performing a component primary shaping of said product;

and

(f) curing the coating film clearcoat layer.

13. (New) The method of claim 12, wherein step (b) is executed prior to step (a).

14. (New) The method for the production of an integrated antenna structure as claimed in claim 12, wherein
the coating-film clearcoat layer is cured by irradiation with UV light.

15. (New) The method for the production of an integrated antenna structure as claimed in claim 13, wherein
the coating-film clearcoat layer is cured by irradiation with UV light.